

Harvest Report 2003 – Tree Fruit

Cherry

Fruit set was much better than in 2002 in most varieties, though not as heavy as in peak record years. Most cherry varieties produced significant quantities of fruit for harvest. Due to the unusually dry and warm conditions the crop overall was excellent. **Lapins** and **Sweetheart** were both very productive on Gisela 5 and Gisela 6 respectively. Recent introductions **Hartland**, **Black Gold** and **White Gold** were moderately productive as well. **Rainier** is considered a prime quality white fleshed variety, and has been productive on Gisela 5 rootstock in most years when compared with standard rootstocks which often see a lot of fruit drop.

Sour cherries generally bloom and fruit later than sweet cherries. They are softer and more resistant to cracking and to diseases like bacterial canker. **Surefire**, a newly introduced pie cherry, again produced a good crop. It has dark red juice (unlike **Montmorency** which has clear juice), which is very attractive when used for jam and pie. Several new introductions also produced fruit and preliminary evaluations were recorded. **Glacier** produced its first fruit for evaluation in 2003. Recently introduced from WSU, it is a dark, sweet cherry somewhat softer in texture than Bing. **Tehranivee** and **Vandalay** are new introductions from Canada that may be promising in the late season, with **Lapins** and **Sweetheart**.

New: Varieties that are not yet fruiting include **Almaden Duke**, **Balaton**, **Coe's Transparent**, **Governor Wood**, and **Sonata**.

Discard

- **Early Burlat** – fully evaluated, productive very early variety
- **Hudson/Giesela 6** – too large, replace with trees on Giesela 5
- **Sweet Anne** – fully evaluated, removed from old block, same type as Rainier but inferior flavor.
- **NY 9295** – late ripening, lacks sweetness

Apricot

The 2003 season again saw a poor crop for most apricots at Mount Vernon. No apricot variety we have tested has shown any commercial potential because of lack of productivity. **Puget Gold** did produce a fair crop this year on some trees. We continue to look for new apricot varieties that might have better potential.

Discard

- **NY 604** – unproductive
- **Deatrick** – unproductive
- **Sunglo** – unproductive

Peach

In 2003 fruit set was low in all varieties. Even the usually productive varieties yielded poorly in most cases. Again, we are looking for consistent productivity as well as quality, and are removing varieties and selections that have not measured up. New selections from various breeding programs were planted into a new stone fruit block south of the blueberries in spring 2002. Some of this material includes so-called "crisp flesh" peaches, and other new selections with fruit characteristics that may be very interesting. We look forward to seeing sample fruit from this plot in 2004.

Mature trees of **Harbelle**, **Harken**, and **Redhaven** provided a limited amount of fruit for harvest days. **Starfire**, about two weeks after **Redhaven**, was much less productive than usual. **Harrow Fair** also had some fruit on young, small trees. **Harrow Beauty** set some fruit on young trees. Of the Harrow peach selections currently on trial, **HW 272** is usually productive, though set this year was poor, and the yellow fleshed fruit is high quality.

Nectarine

Bloom conditions for the nectarines were the same as for the peaches, and fruit set in most varieties was very poor. The exception was **Hardired**, a yellow fleshed nectarine ripe about 10-15 days after **Redhaven**, which set a good crop of fruit on all 5 trees. At present it is the only nectarine variety on trial here that is a reliable producer from year to year.

Plum

While 2003 was not the best year for plum production, most varieties yielded good crops and the quality was excellent. Later ripening varieties did particularly well. **Early Laxton** and **Hollywood** had smaller crops than usual. **Obilnaja**, from eastern Europe, produced a good yield flavorful fruit, small to medium in size. **Imperial Epineuse**, **Victory** and **Seneca** are all proving to be reliable productive varieties with high quality fruit. **Queen Victoria**, a classic English variety ripe in mid season, was somewhat overcropped in 2002 and showed it this year with smaller yields, but quality was still very good, and it is a consistent producer. **Purple Gage**, one of the newer varieties, set a good crop of fruit, purple-blue in color with greenish yellow flesh, rather small but very sweet and juicy.

Trees fruiting for the first time in 2003 included **Silver Prune**, ripe in mid September, with rather small purple-pink oval fruit, free stone with very sweet flesh. Three Italian prune types from the Vineland, Ontario breeding program looked interesting this year. **Vanetta** (ripe in mid-August), **Veeblue** (late August) and **Vision** (late September) each produced attractive oval fruit, dark purple-blue with dense sweet flesh. All will be further evaluated in 2004.

Discard

- **Allo** – fully evaluated, bland and mushy
- **Kita** – cling stone, drops easily

Pear

In 2003 all of the mature pear trees were very productive. Early ripening varieties such as **Clapp's Favorite** (including the Bennett strain and Red Clapp's), **Rescue** and **Bartlett** are best used within 2-4 weeks of harvest. Most of these varieties are good for canning as well. **Rescue** will keep a bit longer to about 6-8 weeks. The **Bosc** pear trial was concluded in 2002 but some specimen trees were kept for harvest this year. Yields for **Starkrimson**, **Bosc**, **Concorde** and **Conference** were very good. Trees of **Comice** were very productive, and some of the fruit was used for making a sample of perry (similar to hard apple cider, made from pear juice.)

Young trees of the russet sport **Taylor's Gold Comice** yielded heavy crops of very attractive, uniform fruit. This variety appears to have excellent potential for commercial production in cool maritime climates like ours. In the late season, **Abbe Fetel** and **Packham's Triumph** both had a heavy set of good sized fruit.

Discard

- **Bella de Guigno** – fully evaluated, very early, sweet, productive
- **Highland** – fully evaluated, excellent fall storage pear, productive, flavorful
- **Starkrimson (Red Clapp's Favorite [Kalle strain])** – fully evaluated, attractive red skinned early pear, productive, uniform, mild sweet flavor
- **Ubileen** – fully evaluated, early pear, large, attractive, will ripen on tree
- **Sirrine** – fully evaluated, excellent flavor but sprawling tree habit difficult to train
- **Bosc, Golden Russet** – fully evaluated, similar to standard Bosc
- **Bosc, Wenatchi Gold** – fully evaluated, similar to standard Bosc
- **Bosc, Bronze Beauty** – fully evaluated, similar to standard Bosc, heavy dark russet
- **Forelle** – fully evaluated, productive, small, firm, colorful, late ripening

Asian Pear (Nashi)

Since we are in the process of relocating the former Asian pear block, some varieties did not have fruit for evaluation this year. Mature trees of most varieties set well in 2003 and some were thinned to improve fruit size. Young trees of **Hamese #1** (yellow skin) ripened earlier than usual in August. **Mishirasu** produced some very large fruit. Although the fruit is heavily russeted and unattractive, the excellent flavor and firm crisp texture make it a good choice for home gardens. **Olympic**, (also known as **Arirang** or **Korean Giant**) and **Shin Li** are sometimes too late ripening in our area but did well in the long hot season of 2003. Their overall suitability, however, is questionable.

Discard

- **Shin Li** - too late, unproductive

Unusual Fruit

In 1997 a planting of unusual fruit was established with additions in 2000-02. We are evaluating various kinds of tree and bush fruit to see if they are well adapted to western Washington conditions, and note any specific cultural needs that may apply to growing them in our area. Among the fruit kinds that have been planted are figs, kiwi varieties (both *Actinidia deliciosa* and *A. arguta* clones), black, red and white currants, persimmons, paw paws, and seedless grape varieties. Some of the uncommon bush fruits include aronia, mulberry, elderberry, honeyberry, sea buckthorn, mountain ash, cornelian cherry, azerole, and sorbus.

In 2003 there was a very good crop on all the kiwis but particularly the hardy kiwi varieties. **Ananasnaja**, **Hardy Red** and **Ken's Red** all produced significant crops of good quality. Hardy kiwi have very good potential for commercial production, including organic culture as they are effectively disease resistant. Two plants of **aronia** (*A. melanocarpa*) planted in 1998, have produced consistently heavy yields since 2001. Bushes must be netted to keep birds away, as the berries do not reach full ripeness (20-22 brix) until mid October. Fruit will continue to ripen on the bushes turning to "raisins." Aronia has potential in our area for an alternative fruit crop in commercial production; its home garden use is mostly for juice and jelly.

Trees of quince **Aromataya** (planted 1999) and **Van Deman** (planted 2000) both produced fruit in 2003 but not as heavily as the previous year. Quinces are primarily used in cooking, as they are very hard and rather inedible direct from the tree. Varieties of mountain ash **Ivan's Beauty**, **Ivan's Belle** and **Nevezhinskaya** all produced a crop of fruit for evaluation in 2003. Here again culinary preparation is needed as the fruits direct from the tree are not appealing in texture (rather mealy) and quite astringent in flavor. The trees are very ornamental with attractive deep green leaves, white clustered flowers, and bright red or orange fruit. Varieties of Cornelian cherry (*Cornus mas*) **Red Star**, **Pioneer** and **Elegant** planted in 1998 produced well in 2003. The fruits are red, about 1" long and narrowly oval in shape with a single large seed. They can be eaten off the bush but are somewhat strongly flavored so might more commonly be used in cooking for jelly or jam. The flowers, opening very early in spring (February-March) are a showy bright yellow and cover the bushes before the leaves emerge, making this a spectacular ornamental shrub.

Apple

In 2003 the fruit set was very good and hand thinning where needed resulted in acceptable fruit size for most varieties. In determining optimum harvest for a specific variety, we relied extensively on indices of starch conversion, fruit firmness, and soluble solids (sugars) as well as external color. Yields of most varieties were good and fruit quality was high. Evaluation of various **strains of Jonagold and Gala** were completed in 2003. **King**, **Jomured** and **Rubinstar** strains of **Jonagold**, and **Regal** and **Ultrad** strains of **Gala** are being retained in our trial. **Crimson Jonagold** and **Pacific** and **Gala** are still being evaluated.

Trees of **Honeycrisp** were very productive in 2003 and were sampled for both early and late harvest. Some of the early harvest fruit proved to be susceptible to scald, which is often a problem with this variety. Early ripening strains of **Fuji**, **Beni Shogun** and **September Wonder (Jubilee)** are looking very promising for our area. **Braeburn** and **Hillwell (red)** strain produced well with little russet. **Hillwell** is definitely preferable to standard **Braeburn**, and we are still evaluating the new strains **Joburn** and **Lochbuie**.

Among the varieties of Japanese origin that we have tested over the years, the ones best suited to our conditions have proven to be **Akane**, **Sansa** and **Tsugaru**

Homei in the early season, in the mid season **Hatsuaki** and the early **strains of Fuji** mentioned above, and in the late season **Shizuka** and **Mutsu**. **Shizuka** is very productive, flavorful, and more attractive than **Mutsu**, which ripens 7–10 days later in most years. **Mutsu** is of excellent quality but may not ripen fully in cooler areas.

Most of the Japanese introductions are sweet apples. Other good choices in this category include **Zestar (Zesta!)**, a Minnesota introduction ripe in the early season, and **Sunrise** and **Silken** from Summerland, B.C., are reliable producers of good quality fruit. **Aroma** from Sweden is less productive, and tends to ripen over a long period. **Gala** and its strains are noted for sweet flavor. One of the newer varieties in the late season is **Ambrosia** which in our conditions is usually a bicolor apple with most fruit appearing yellow striped with orange red.

Cox types, derived from the English **Cox's Orange Pippin**, are noted for complex flavor blending sweet and tart. **Alkmene**, **Elstar** and its sport **Elista (Daliest)**, **RubINETTE** and **Karmijn de Sonnaville** have all proven their worth as high quality dessert apples. The latter, while no beauty contest winner, has intense flavor that makes it a very popular gourmet item. **Corail (Pinova)** is a promising introduction from Germany with both home garden and commercial potential. Ripe in early to mid October, it is an excellent keeper.

The **McIntosh** variety is very popular in the eastern United States, resulting in many Mac strains and crosses. In previous trials **Jonamac**, **Spartan**, and **Empire** have all proven to be well adapted to our area. **Royal Empire**, a red sport of **Empire**, is very attractive, with good red color, smooth finish, and lively flavor. **Redcort**, a red sport of **Cortland**, has a unique tart flavor at first picking and retains its firmness for later pickings. **Empire** and **Redcort** store better than the other Mac types. In 2004 we will be evaluating a number of Mac strains for their overall performance in terms of productivity and fruit quality. A McIntosh cross from Geneva, NY that has just been named is **Millenium (NY 460)**. Ripe in the late season, it has good flavor and stores very well.

Disease Resistant Cultivars & Selections

With its clean, crisp tartness and bright yellow color, **Pristine** is an outstanding early variety. Flavor is good on **Wynooche** but its tendency to drop and uneven ripening requires careful watching and multiple picks. New introductions from eastern Europe, **Rajka** and **Releika**, produced a good yield of fruit in 2003 and look promising at this point. Both are attractive bright red and of medium size or below. **Rajka** is ripe in late September, with a light, refreshing flavor, and **Releika**, ripe in late September to October, hangs on the tree without softening until November. A third variety, **Resi**, fruited for the first time in 2003. It set well for a young tree and the fruits were sweet and crisp, with good red color. **Belmac**, a new scab immune Mac type from eastern Canada, ripens in mid to late October. It looks like it could be very promising as a late keeper, better than **Enterprise**.

This year we did a strict evaluation of the many disease resistant selections we have had on trial over the years and eliminated all but the best. Among those we kept, **HWR-19T-18** stood out in the early season. The fruit is firm and flavorful with attractive red color and hangs on the tree for a long time. **CLR-20T-60** is a large bicolored apple with good flavor that should be color picked for best quality. Geneva selections **NY 79507-72**, **NY 75414-1** and **NY 65707-19** all rated well for flavor and appearance. We will be inquiring to see if any of these are going to be named.

In 2003 a number of new selections were added to the disease resistant test plot: **AK 49-191-95**, **AK 51-19-95**, **AKR 52-151-95**, **AKR 53-44-95**, **UEB 2420-3**, **UEB 2439-1**, **UEB 2489-1**, **UEB 3148-1**, **UEB 3241-3**, **UEB 3262-2**, **UEB 3264-2**, **UEB 3267-1**, **UEB 3277-1**, **UEB 3285-2**, and **UEB 3290-1**.

Discard

- **Arllet** – fully evaluated, russets, better in warmer areas
- **Elliott** – fully evaluated, too late in most years
- **Enterprise** – fully evaluated, scab immune Mac type, keeps well but flavor not the best, probably be replaced by **Belmac**
- **Fiesta** – fully evaluated, Cox type
- **Fuji, Standard** – fully evaluated, too late in our area, choose available early clones
- **Ginger Gold** – fully evaluated, early Golden type, quality less than best
- **Goldensheen** – Delbard introduction, Golden Delicious type, bland flavor
- **Goldblush, Spur** – Golden Delicious type, not well adapted here, mediocre flavor, too late
- **Jonagold, DeCoster** – fully evaluated red sport of Jonagold, good commercial
- **Jonagold, Nicobel** – fully evaluated sport, similar color to standard
- **Lucky Rose** – Golden Delicious type, sweet, good finish but bland flavor (NOT a pink fleshed variety)
- **Pixie Crunch (Coop 33)** – (recently named, evaluated as Coop 33) mildew susceptible, russets, flavor acceptable but not best
- **Redchief** – Red Delicious type, late, bland, needs warmer conditions
- **BC 8S-27-2** – fully evaluated, previous discard
- **BC 8S-29-18** – fully evaluated, not well adapted here
- **Coop 34 (TNR-10T-11)** – fully evaluated, excellent color and good flavor but highly susceptible to mildew
- **Coop 44** – fully evaluated, tough skin, sweet, bland
- **CMR-2T-13** – fully evaluated, serious russet, some fruit drop, mediocre quality
- **CQR-10T-17** – fully evaluated, good flavor, attractive color but very mildew susceptible
- **NATCO 73** – fully evaluated, too late
- **NY 75413-30** – fully evaluated, red blush attractive, uniform, productive, good flavor, late
- **NY 75441-67** – fully evaluated, good flavor, color attractive dark red
- **NY 79529-70** – fully evaluated, flavor only passable, tough skin
- **NY 81204-42** – fully evaluated, too late, flavor mild, bland, some russet
- **OSU 31-19** – fully evaluated, excellent color, good flavor, late ripening, hangs well on tree
- **PAR-12T-101** – fully evaluated, good color but flavor only passable, late
- **PSWR-11T-48** – fully evaluated, tough skin, russetting, tends to drop
- **PWR-11T-128** – fully evaluated, mediocre quality
- **P15R-3T-89** – fully evaluated, productive but too late in most years, flavor mediocre

Cider Apples

Trees in a replicated plot of cider apples -selected for hard (fermented) cider production- were harvested for cider production in 2003, again with the cooperation of Drew Zimmerman and the Northwest Cider Society. The varieties **Brown Snout**, **Foxwhelp**, **Muscadet de Dieppe**, **Vilberie** and **Yarlington Mill** (planted 1995) and **Brown's Apple**, **Chisel Jersey**, **Dabinett**, **Harry Masters' Jersey**, **Kingston Black** and **Michelin**, (planted 1999) all produced fruit for cider this year.

Varieties added to the replicated plot in 2002 were **Breakwell Seedling**, **Bulmer's Norman**, **Frequin Rouge**, **Golden Russet**, **Medaille D'Or**, **Reine des Hatives**, **Reine des Pommes**, **Somerses Redstreak**, **Tom Putt** and **Tremlett's Bitter**. Sample fruit was produced on some of these trees in 2003 but not enough for evaluation. Varietal ciders were made for evaluation as well as blends from cider and standard varieties. These ciders will be evaluated in 2004. For anyone who is interested in hard cider making, see the [2003 Cider Report](#). For general information on cider apple varieties and culture, click [here](#).

Crabapple

In 2003 data was taken on trees in the established crabapple trial plot, including bloom dates in spring (April-May) and a rating in late fall (November) of scab, mildew, and general tree health. Overall ornamental quality at that time was rated also. Photographs were taken to document the appearance and qualities of promising varieties for use in publications. During the summer of 2003 an area was prepared for planting of the new ornamental tree fruit trial, which will include the existing ornamental crabapples and add stone fruit (ornamental cherry, plum, peach and other *Prunus* spp.) and ornamental pear cultivars and selections. These are being planted in 2003-04.

Best rated ornamental crabapples include '**Evereste**,' '**Golden Raindrops**' and '**Red Jewel**' which show excellent overall ornamental quality and high disease resistance. Both '**Evereste**' and '**Red Jewel**' have abundant bright red fruit that persists well into the winter. Fruit of '**Golden Raindrops**' is also persistent but yellow, small and less conspicuous. Other white-flowering crabapples with good appearance and disease resistance are '**Adirondack**,' '**Christmas Holly**,' '**Lancelot**,' '**Silver Moon**' and '**White Angel**.' All of these will fit well to the backyard and urban landscape. '**Silver Moon**' is large and vigorous, a fine candidate for public open spaces such as parks.

Three recent introductions show very dwarf tree habit, almost bonsai-sized. '**Guinevere**' is a tree of horizontal spreading habit, with greenish bronze leaves and medium pink buds opening to pinkish white flowers. '**Lollipop**' and '**Cinderella**' have abundant white flowers and clean, small leaves of an attractive light green. The fruit is tiny and pearl-like; '**Cinderella**' is yellow and '**Lollipop**' is red. Any of these will fit well into a patio pot. '**Lancelot**' (see above) is somewhat larger, with mature trees of a very compact upright habit reaching 6'-7' high and about 5' diameter. They would do well as specimen trees in small entry and courtyard areas.

In pink-flowering crabapple varieties, '**American Spirit**,' '**Louisa**,' '**Candymint Sargent**,' '**Pink Princess**,' '**Prairifire**' and '**Prairie Maid**' are proving to be well adapted. '**Prairifire**' stands out for its intense deep pink color, though it is somewhat less resistant to scab. We are seeking a replacement that is equally ornamental with better scab resistance. '**Louisa**' is an excellent specimen tree, with a strongly weeping habit and pale rose-pink flowers. The graceful limb structure is attractive even in winter when all the leaves are gone. Field resistance to scab and mildew is also very good.

A 2002 introduction originating in the Puget Sound, '**Marilee**' is patented by Marvin Jarmin of Mount Vernon. It has pink and white semi-double flowers and a narrowly upright growth habit which would be suitable for street side ornamental planting, especially as it sets no fruit to drop and make a mess. A WSU cross of Alkmene X Prima with white single flowers is immune to scab and produces attractive yellow fruit that hangs on the tree well into winter if not harvested. The fruit is tart but edible, useful for jelly, pickled fruit, and hard cider blending. Pollination trials in 1998 showed that this seedling will pollinate both Jonagold and Fuji. '**Pink Cloud**' seedling has highly ornamental pink double flowers, bronze leaves, and large, tart red fruit.

Discard

- **Jewelberry** – fully evaluated, small delicate trees, non-vigorous, good for limited area planting
- **Winter Gem** – fully evaluated, good disease resistance but not outstanding in ornamental quality
- **Donald Wyman** – fully evaluated, good disease resistance but not outstanding in ornamental quality
- *Malus Tschonoskii* – fully evaluated, ornamental only for its narrowly upright form, no showy flowers or fruit
- *Malus Yunnanensis* v. *veitchii* – fully evaluated, ornamental only for its narrowly upright form, no showy flowers or fruit
- **Purple Prince** – fully evaluated, purple leaf type but color gets dull fast in summer, scab susceptible

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